In compliance with continuing education requirements, all presenters must disclose any financial or other associations with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters as well as any use of unlabeled product(s) or product(s) under investigational use.

CDC, our planners, content experts, and their spouses/partners wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters with the exception of the following speakers:

Amanda Dempsy of the University of Colorado Denver wishes to disclose she is a consultant for Pfizer in Meningococcal B research study, served on Advisory board member for Merck for HPV vaccines, and served on advisory board member for Pfizer for Meningococcal B vaccines.

Planning committee discussed conflict of interest with each presenter to ensure there is no bias.

Content will not include any discussion of the unlabeled use of a product or a product under investigational use.

CDC did not accept commercial support for this continuing education activity.
The association between provider recommendation and influenza vaccination status among children 6 months–17 years, United States, 2013–14 through 2015–16 influenza seasons

Katherine E. Kahn, MPH
Leidos

National Immunization Conference
May 17, 2018
Background

- Influenza can be a serious disease that can lead to hospitalization and sometimes even death
  - Rates of infection are highest among young children and older adults
- Vaccination is an effective strategy to prevent influenza infection and potentially serious complications
- Since 2008, the Advisory Committee on Immunization Practices (ACIP) has recommended influenza vaccination for all children 6 months–18 years
- Healthy People 2020 target: 70%
- Influenza vaccination coverage among children: 59.0% (2016–17 season)
- Provider recommendation has been associated with increased influenza vaccination coverage in a variety of populations (e.g. high-risk adults, Medicare beneficiaries, pregnant women, and children with asthma)
Objectives

- Determine the proportion of children 6 months–17 years in the United States for whom a provider recommendation for influenza vaccination was received during the 2013–14, 2014–15, and 2015–16 influenza seasons
- Identify demographic characteristics associated with receipt of a provider recommendation
- Examine the association between provider recommendation and influenza vaccination status
Data Source and Methods

- **National Immunization Survey-Flu (NIS-Flu)**
  - On-going, national list-assisted random-digit-dial landline and cellular telephone survey of households with children
  - NIS Child (19–35 months), NIS Teen (13–17 years), and NIS child influenza module (6-18 months, 3–12 years)
  - NIS-Flu data used to assess influenza vaccination coverage among children are based solely on parental report
  - Interviews conducted April–June in 2014, 2015, and 2016 included additional questions about provider recommendation
Data Source and Methods (2)

- **NIS-Flu questions**
  - “Since July 1st, has [sample child] had a visit to a doctor or other health professional about his or her health?”
  - Respondents who answered “Yes” were asked, “Since July 1st, did a doctor or other health professional tell you they recommend or say it was a good idea for [sample child] to get a flu vaccination?”
Data Source and Methods (3)

- **Analysis**
  - Univariate and bivariate analyses with Wald chi square statistics and pairwise comparison t tests (p<0.05) to determine differences between groups
    - Imputations where month and year of vaccination missing
  - Multivariable logistic regression to determine independent associations
    - Demographic characteristics and receipt of provider recommendation
    - Receipt of provider recommendation and vaccination status (vaccination period from July 1st through the time of interview)
  - Data were analyzed using SUDAAN to account for complex survey design
Results
Percent of children 6 months–17 years whose parents received a provider recommendation for influenza vaccination, United States, NIS-Flu, 2013–14, 2014–15, and 2015–16 influenza seasons
Percent of children 6 months–17 years whose parents received a provider recommendation for influenza vaccination, by state, United States, NIS-Flu, 2015–16 influenza season

Range: 49.6% (WY) – 83.7% (D.C.)
Percent of children 6 months–17 years whose parents received a provider recommendation for influenza vaccination, by select demographic characteristics, United States, NIS-Flu, 2015–16 influenza season

- U.S. 70.3%

- 6–23 months: 80.0%
- 2–4 years: 75.8%
- 5–12 years: 72.2%
- 13–17 years: 61.6%
- 1 child: 66.2%
- 2–3 children: 71.5%
- 4 children: 73.7%
- Northeast: 76.0%
- Midwest: 70.7%
- South: 68.4%
- West: 69.0%
Demographic characteristics associated with parental receipt of a provider recommendation for influenza vaccination among children 6 months–17 years, United States, NIS-Flu, 2015–16 influenza season

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>APR ± 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child's age</strong></td>
<td></td>
</tr>
<tr>
<td>6–23 months vs. 13–17 years</td>
<td>1.31 (1.25–1.37)</td>
</tr>
<tr>
<td>2–4 years vs. 13–17 years</td>
<td>1.23 (1.16–1.29)</td>
</tr>
<tr>
<td>5–12 years vs. 13–17 years</td>
<td>1.17 (1.11–1.22)</td>
</tr>
<tr>
<td><strong>Poverty/household income</strong></td>
<td></td>
</tr>
<tr>
<td>Above/&gt;$75,000 vs. Below</td>
<td>1.06 (1.00–1.13)</td>
</tr>
<tr>
<td><strong>Number of children</strong></td>
<td></td>
</tr>
<tr>
<td>2–3 children vs. 1 child</td>
<td>1.06 (1.02–1.11)</td>
</tr>
<tr>
<td><strong>Region of residence</strong></td>
<td></td>
</tr>
<tr>
<td>Northeast vs. South</td>
<td>1.11 (1.07–1.16)</td>
</tr>
</tbody>
</table>

- The logistic regression model included child’s age, sex, and race/ethnicity, language survey completed, mother’s education, poverty/household income, number of children in household, metropolitan statistical area, and region of residence.
Percent of children 6 months–17 years whose parents received a provider recommendation for influenza vaccination and vaccination status by receipt of a provider recommendation, United States, NIS-Flu, 2015–16 influenza season

Population Attributable Risk (PAR) = \( \frac{P(PR-1)}{P(PR-1)+1} \)

= 46.8%
Potentially achievable influenza vaccination coverage among children 6 months–17 years, by state, United States, NIS-Flu, 2015–16 influenza season
Association of receiving influenza vaccination with parental receipt of a provider recommendation among children 6 months–17 years, United States, NIS-Flu, 2015–16 influenza season

<table>
<thead>
<tr>
<th>Provider recommendation received</th>
<th>Yes vs. No</th>
<th>APR ± 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.12 (1.98-2.28)</td>
</tr>
</tbody>
</table>

- The logistic regression model included parental receipt of provider recommendation, child’s age, sex, and race/ethnicity, language in which the survey was completed, mother’s education, poverty/household income, number of children in household, metropolitan statistical area, and region of residence.
Conclusions

- Provider recommendation is strongly associated with higher likelihood of influenza vaccination, yet, about 30% of children had a parent report not receiving a provider recommendation for their child.

- Parental receipt of a provider recommendation for influenza vaccination was found to be associated with certain demographic characteristics, such as younger age, higher household income, multiple children living in the household, and residing in the Northeast.

- There is large state variability in parental receipt of a provider recommendation for influenza vaccination.
Limitations

- Provider recommendation receipt and influenza vaccination status were based on parental report – subject to respondent recall bias
  - If the child was vaccinated, the parent might be more likely to remember receiving a provider recommendation
  - Interviews conducted in April, May, and June, likely several months after provider recommendations and vaccinations were received

- Response rates low – nonresponse bias may remain even after weighting
  - Range: 53.5%–64.8% for landline, 29.9%–38.8% for cell phones
Public Health Implications

- All vaccine providers should be made aware of the importance and impact of their vaccine recommendations on vaccine uptake
  - We found that approximately 47% of influenza vaccination among children could be attributed to provider recommendation in 2015–16

- Greater implementation of strategies known to increase vaccination coverage, such as provider recommendations and patient reminders, can reduce missed opportunities for vaccination and the health impact of influenza on children
Acknowledgements

- Tammy Santibanez, CDC
- Yusheng Zhai, Leidos
- Carolyn Bridges, Berry Technology Solutions, Inc.
Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Utilizing Communication Campaigns to Increase HPV Vaccination Coverage: NACCHO’s Support to Local Health Departments

National Immunization Conference
May 15 – 17, 2018
Atlanta, Georgia

Kimberly Scott, MPH
Senior Program Analyst, Immunization

NACCHO
National Association of County & City Health Officials
Outline

- About NACCHO
- Overview of NACCHO’s HPV Demonstration Sites Project
- Capacity Building Support Provided to Project Sites
- Lessons Learned and Recommendations
- Question and Answer
NACCHO is comprised of nearly 3,000 local health departments across the United States. Our mission is to serve as a leader, partner, catalyst, and voice with local health departments.

There’s value in belonging. Learn more by viewing a short video available on our website.
Background

**Problem:**
- Human papillomavirus (HPV) is a common virus in the U.S. with nearly 80 million people currently infected and approximately 14 million people becoming newly infected each year.
- Vaccination rates remain low and disparities in vaccination coverage persist.

**Project:**
- Direct funding and support provided to 20 LHD awardees who were determined to have low HPV vaccination coverage
## HPV Demonstration Sites Project

### Action Planning
- Environmental scan to identify community stakeholders
- NACCHO Site Visits
- Plans reflective of six common themes

### Project Advisory Board
- Review project materials
- Provide feedback on action plans
- Provide technical assistance to project sites
- Assist with educational material development, testing, and dissemination

### Demonstration Sites In-Person Meetings
- 3 meetings
- Capacity building focused on action planning, sustainable practices, data & evaluation, communication, forming partnerships, and strategies for vaccine completion

### On-Going Capacity Building Support
- "HPV Learning Community" Tool
  - Monthly Conference Calls
  - Webinars
  - Information Exchange

---

**NACCHO**
National Association of County & City Health Officials
Local Health Department
Action Planning and Priorities

- Reinforce the message that HPV vaccination is cancer prevention
- Educate and support providers
- Engage partners as champions
- Identify resources to educate parents
- Improve data collection
- Identify vaccination barriers
- Increase access to the HPV vaccine
- Reinforce the message that HPV vaccination is cancer prevention
- Identify resources to educate parents
Local Health Department Communication Campaigns

If there were a vaccine against cancer, wouldn’t you want it for your kids?

The HPV vaccine is cancer prevention. Talk to your doctor about vaccinating your sons and daughters against HPV.

THE HPV VACCINE IS CANCER PREVENTION

$7,200,000 people in the United States now receive the HPV vaccine.

Florida has the 2nd lowest HPV vaccination rate.

Florida’s HPV vaccination rate is still below the national average of 70%.

Florida has the highest percentage of preventable cervical cancers in the nation.

Florida has the 2nd highest death rate from cervical cancer in the nation.

THE HPV VACCINE IS NOW AVAILABLE IN FASTER, MORE EASY-TO-USE FORM.

Dance to Beat Cervical Cancer Zumbathon

Saturdaty January 30th

9th Annual NCAC

Click for more information.

Registration Open!

“You Are the Key to HPV Cancer Prevention” Education Session

HPV Vaccination Strategy Stakeholder Meeting

Tuesday, April 7, 2015

9:30am - 1:00pm

Seminole County Emergency Services Training Academy

Seminole County Emergency Services Training Academy

Seminole County, Florida 32772

For more information:

info@naccho.org

407-845-1802

NACCHO

National Association of County & City Health Officials
Increase in HPV Vaccine Doses Administered and Vaccine Series Completion

- Tarrant County Public Health, Texas: Increased by 26% the total number of HPV vaccine doses administered over the course of two years.
- Niagara County Department of Health, New York: Increased by 33% the total number of HPV vaccine doses administered over the course of one year.
- Orange County Department of Health, New York: Increased the number of females and males who initiated (3% and 16% respectively) and completed (13% and 17% respectively) the HPV vaccine series over the course of one year.
- Florida Department of Health - Pinellas County: Increased the number of HPV vaccine doses administered among females (6%) and males (7%) ages 11–26 over the course of one year.
- Florida Department of Health - St. Johns County: Increased the percentage of adolescents who received the HPV vaccine from 44% to 80% over the course of one year, which exceeded its goal of 75%.
- Florida Department of Health - Broward County: Increased the number of HPV vaccine doses administered by 82%. DOH-Broward satellite clinics increased by 197% the number of HPV vaccine doses administered over the course of one year.
Communication Campaigns: Promising Strategies and Lessons Learned

**Stakeholder Engagement**
- Stakeholder engagement improves understanding of community views around HPV vaccination, fosters trust, and increases awareness of potential barriers and strategies to overcome those barriers.

**Provider Education and Support**
- Provider education and support will increase provider confidence to make a recommendation; that recommendation is the strongest predictor of an adolescent’s HPV vaccination.

**Health Information Systems**
- Health information systems help to generate data and conduct other vital functions that can assist in HPV program decision-making and sustainability.

**Tailored Message**
- Communications campaigns tailored to the audience can reduce stigma around HPV prevention and vaccination and will increase the reach of messaging.
Recommendations to Building Effective Communication Campaigns

- Clear and concise **action plan**
- Engage all and a variety of **stakeholders**
- Educate HPV **vaccine providers**
- Use **immunization information systems and data** (e.g., surveillance systems, immunization registries, and Assessment, Feedback, Incentives, ExChange (AFIX) data)
Guide to HPV Resources for Local Health Departments

- Includes educational and communication tools that can be adapted for HPV project planning
- Highlights the initiatives and resources of the NACCHO HPV Demonstration Sites Project
- Encourages LHDs to share resources with providers, parents, and adolescents in the community
- Incorporates a variety of resources for LHDs to conduct outreach
Guide to HPV Resources for Local Health Departments

Engaging Parents and Adolescents:
• Utilize to increase parents’ and adolescents’ awareness and knowledge of the HPV vaccine
• Includes audio & video communication, print materials, guidance documents, websites, and online tools.

Engaging Providers:
• Shares information on the benefits of the HPV vaccine, tips for talking to parents & adolescents, and strategies for increasing vaccination rates
• Includes audio & video communication, letters & opinions, print materials, guidance documents, websites, and online tools

Engaging All Audiences:
• Utilize for outreach to the greater community to improve HPV vaccination rates
• Includes infographics, data & statistics, audio & video communication, print materials, guidance documents, websites, and online tools

Collaborating with Roundtables and Coalitions
• Provides information about the work that coalitions are doing around the country to improve vaccination rates and identify potential opportunities for partnership
• Websites include print materials, sample messaging, and tips for communication campaigns
Lilly Kan, MPH  
Senior Director, Infectious Disease & Informatics  
Phone: (202) 507-4238  
E-mail: lkan@naccho.org

Michelle Cantu, MPH  
Director, Infectious Disease & Immunization  
Phone: (202) 507-4251  
E-mail: mcantu@naccho.org

Kimberly Scott, MPH  
Senior Program Analyst, Immunization  
Phone: (202) 595-1123  
E-mail: ksharpe-scott@naccho.org

Kerry Premo, MPH  
Program Analyst, Immunization  
Phone: (202) 507-4268  
E-mail: kpremo@naccho.org

Nyana Quashie  
Senior Program Assistant, Infectious Disease & Informatics  
Phone: (202) 507-4233  
E-mail: nquashie@naccho.org
A cluster-randomized, pragmatic trial of a physician communication intervention for increasing adolescent HPV vaccination

Amanda F. Dempsey, MD PhD, MPH
National Immunization Conference
May 2018
Why Don’t We Know More about How to Communicate with Parents and Patients about Vaccines?

- Tons of research on parents’ knowledge, attitudes, beliefs
- Little research on what communication techniques actually change parents’ behavior
- Research in this area is complicated!
- We’ve been focused on the ‘what’ more than the ‘how’
Core Assumptions that are Wrong

• Improved knowledge = Better decisions
  • Known as the ‘Information Deficit Model’

• Humans are rationale
Vaccination decisions are based on emotion, not logic, reason, or “facts”
Vaccine Communication 2.0

• Correcting knowledge gaps is often not enough to address parents who have concerns about vaccines

• We need interventions on how people actually think rather than how they ought to think
The Provider Communication Trial

Timing of Implementation:
- Before Visit
- At Visit
- After Visit

Unaware → Aware but Unengaged → Deciding about Acting → Acting (vaccinate)

Website
Communication Training, Fact Sheet, Disease Images
Decision Aid

Deciding NOT to act
Your Questions About the HPV Vaccine
In your survey, you had some general questions about the HPV vaccine. We've listed each of those questions below. Tap a concern to read more.

- What is Ella's risk of getting HPV?
- Is my child too young for the vaccine?
- What are the side effects of the vaccine?
- Is it worth waiting to see if the vaccine is ok?
- Will the vaccine make my child think it is ok to have sex?
HPV Fact Sheet

• 1-2 sided
• Practices choose from library of facts, images and pictures
• Implementation varies based on practice needs
• Some also offering in Spanish
HUMAN PAPILLOMAVIRUS (HPV) FACTS

HPV is Common and May Lead to Serious Disease

- Up to 75% of HPV infections occur among people 15 through 24 years old.
- HPV infection is equally common among both males and females.
- Treatment of problems associated with HPV, like genital warts, are painful and often require multiple treatments.
- HPV infection can lead to genital warts, abnormal pap smear tests, and/or cancer of the cervix, vagina, penis, anus, tonsils, and throat.
- Most symptoms of HPV can’t be seen so a person can be infected and/or spread HPV without knowing.

Why get vaccinated?
There is NO CURE for HPV infection, so it is best to prevent it.

The HPV vaccine is 1 of 4 vaccines that your child’s medical provider recommends for your 11-12 year old. The 4 vaccines are: meningococcal vaccine (protects against a type of meningitis), HPV vaccine (protects against HPV), Tdap vaccine (protects against tetanus, diphtheria, and whooping cough), and influenza vaccine (protects against the flu).

The HPV vaccine is safe. You cannot get HPV from the vaccine, it does not contain the virus. Instead, the vaccine acts like the virus, causing the body to make proteins that can block infection from the actual virus.

The HPV vaccine works almost 100% of the time at preventing the most common HPV from causing disease.

Getting the HPV vaccine doesn’t increase likelihood of sexual activity. Scientific studies show that vaccinating adolescents against HPV is not related to sexual activity.

Abnormal pap results can be a first sign of serious problems like cervical cancer. Cervical cancer is the 3rd most common cancer in the U.S. among women. Untreated cervical cancer in the U.S. leads to more than 4000 deaths per year.

Who should get vaccinated?

Boys 11-12 should get vaccinated.

Benefits of vaccinating at a young age:
- Preteens’ bodies have a stronger response to the vaccine, so protection from the disease may be longer.
- Benefits of vaccinating at a young age:
  - 1. Preteens’ bodies have a stronger response to the vaccine, so protection from the disease may be longer.
  - Boys 13-21 and girls 13-26 years old who have not had the vaccine should get the vaccine ASAP.

BOYS 11 – 12 Years Old

Benefits of vaccinating at a young age:
- Preteens’ bodies have a stronger response to the vaccine, so protection from the disease may be longer.
- 2. Your child will be protected before he or she even thinks about sex.

GIRLS 11 – 12 Years Old

For more info, please visit: https://www.cdc.gov/hpv
Communication Training

Blanket Recommendation

Presumptive Style

Vaccinate or Use Motivational Interviewing Techniques
MI in a Nutshell

• A way of “being” with the client, not just a set of counseling techniques*

• Provider becomes a “helper” in the change process

• Works to strengthen a person’s *intrinsic* motivation for a behavior

• More about the words you use than the underlying goal

*Miller and Rollnick, 1991
Skills of “Micro-MI”

- Importance/confidence ruler
- Seek Permissions (elicit-provide-elicit)
- Open-ended questions
- Reflections
- Affirmations
- Summaries
Study Design - RCT

- Cluster RCT
- 16 clinics in Colorado
- >30,000
- HPV vaccine series initiation and completion
- Difference in difference analysis
Use and Usefulness Assessment

- Conducted throughout 12-month trial
- 4 serial surveys
- Outcomes self-reported
# Main RCT Results

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Intervention</th>
<th>Difference in Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>Adjusted*</td>
</tr>
<tr>
<td>Adjusted*</td>
<td>Adjusted*</td>
<td>Adjusted*</td>
<td></td>
</tr>
<tr>
<td><strong>Series Initiation</strong></td>
<td>1.11 (1.03-1.20)</td>
<td>1.62 (1.51-1.75)</td>
<td>1.46 (1.31-1.62)</td>
</tr>
<tr>
<td><strong>Series Completion</strong></td>
<td>0.65 (0.56-0.75)</td>
<td>1.01 (0.87-1.18)</td>
<td>1.56 (1.27-1.92)</td>
</tr>
</tbody>
</table>

* Models adjusted for medical specialty (pediatrics or family medicine), practice type (public or private), patient age, sex, and insurance.

ORs represent changes over 12 months, from baseline to post-intervention.
Other RCT Results

• Similar impact on
  – Both sexes of adolescents
  – All adolescent ages

• No impact on
  – Vaccination during illness visits
  – Family medicine clinics
  – Public clinics/public insurance patients
Use of Intervention Components Over Time

• Fact sheet: 77% → 65%

• Communication training – 90% used, all (98%) would continue using
Usefulness

% of Providers Perceiving Component as Very Useful Over Time
Usefulness

% of Providers Perceiving Component as Very Useful Over Time

- Fact Sheet: 60%
- Disease Images: 20%
- Decision Aid: 20%
- Website: 10%
- Communication Training: 50%
Barriers

• The communication training and fact sheet had the least barriers to implementation.

• Both were felt to be critical components that could not be replaced by other intervention materials.
Implications

• The intervention seemed effective
  – Variations based on practice characteristics

• Perhaps a pared down version could work just as well but be easier to disseminate
The Future

• Dissemination

• Understanding how to make it work in FM and public clinics
MI for the Vaccine Conversation

JAMA Pediatrics | Original Investigation
Effect of a Health Care Professional Communication Training Intervention on Adolescent Human Papillomavirus Vaccination: A Cluster Randomized Clinical Trial

Amanda F. Dempsey, MD, PhD, MPH; Jennifer Pyrzynawoski, MSPH; Steven Lockhart, MPH; Juliana Barnard, MA; Elizabeth J. Campagna, MS; Kathleen Garrett, MA; Allison Fisher, MPH; L. Miriam Dickinson, PhD; Sean T. O’Leary, MD, MPH
**HPV Vaccine: Same Way, Same Day App**

- Brief, interactive role-play simulation

- Designed to enhance healthcare professionals’ ability to introduce HPV vaccine and address hesitant parents’ concerns

- Developed by Academic Pediatric Association, American Academy of Pediatrics, and Kognito

- Free

- Available for mobile devices:
  - From the Google Play Store
  - From the Apple iTunes Store

Collaborators

- Sean O’Leary
- Jennifer Pyrganowski
- Steve Lockhart
- Kathleen Garrett
- Miriam Dickinson
- Jenna Reno
- Jacob Thomas
- Juliana Barnard
- Elizabeth Campagna
- Allison Fisher
Using Research to Develop HPV Messages for Parents and Healthcare Professionals

Judith L. Weiner, PhD
Health Research Analyst
Northrop Grumman Contractor

National Immunization Conference May 17, 2018

Disclosure

No financial disclosures or conflicts of interest.
BACKGROUND AND METHODS

Campaign Background

CDC’s HPV vaccination communication campaign has existed since the first HPV vaccine was licensed in 2006
• Focused on both parents of preteens and clinicians
• Messages emphasize cancer prevention and on-time vaccination at age 11-12 years
• Vaccination coverage has not yet reached Healthy People 2020 goal

Therefore, over the past several years, the HPV vaccination campaign has focused on:
• Helping clinicians learn about effective recommendations
• Addressing parent questions and concerns
Overview of Parent Research

• Parents are generally confident in HPV vaccine
  – The importance and benefit of HPV vaccine
  – Some questions about safety (i.e., pain, side effects, duration of protection) and (in)fertility
  – Questions do not mean lack of confidence
• Main barrier seems to be on-time vaccination at 11-12
  – Some parents, and providers, want to wait
• Provider recommendation is key
  – Provider recommendation is the number one reason parents decide to get HPV vaccine for their child

Clinician-Focused Print Ads:
Pediatricians & Family Physicians
Action Cards: Pediatricians & Family Physicians

GET INTO THE ROUTINE OF RECOMMENDING CANCER PREVENTION

1. MAKE YOUR ELECTRONIC OFFICE SYSTEMS WORK FOR YOU
   Verify that your electronic health record system has prompts needed to alert you to check immunization status for your patients ages 11-12 at every appointment. Ensure the appointment system allows for scheduling appointments upon entrance to practice, and reminds providers to “make appointments for the morning HPV vaccine does before you check out.”

2. INCORPORATE THE STANDARD OF IMMUNIZATION IN YOUR PRACTICE
   Start the vaccine discussion from patient and families, ask your clinic to ensure vaccine is part of the examination, and ensure you are reimmunizing HPV vaccine for your patient ages 11-12 for the same day as you recommend and administer the other adolescent vaccines.

3. RALLY YOUR STAFF AROUND CANCER PREVENTION
   Find out how many of your 13-year-old patients have started or finished the HPV vaccine series and share those data, along with the rates your clinic had with your staff. Don’t go lower in the practice or could be at risk to over-prescribe HPV vaccine questions with outside patients, testing with HPV testing in more patients.

Digital Media Presence
Timeline of Provider Research

Lessons Learned from Provider Research

• Perceived importance of adolescent vaccines among pediatricians
  – Tdap, meningococcal conjugate, and HPV vaccines are all perceived as important. However, HPV vaccine still lags behind in perceived importance

• Pediatricians’ confidence in addressing parents’ concerns
  – Overall, pediatricians reported they felt confident they could address specific parents’ concerns and questions about why girls and boys should receive all doses of the HPV vaccine before their 13th birthday.
Lessons Learned (Cont)

• Barrier – on-time vaccination at 11-12
  – A majority say they routinely recommend HPV vaccine when patients turn 11 or 12.
  – The top reason for not routinely recommending HPV vaccine at 11 or 12 was parental refusal.

• Lack awareness of benefits beyond prevention of cervical cancer and genital warts
  – To understand the true burden of HPV disease

• Provider recommendation is key
  – Parents trust and listen to providers

Refreshed Provider Campaign

- Physician segments
  - Different informational and training needs based on segments of providers

- Pediatrician online message testing survey
  - Most physicians (71%) fell into at least one of four segments that we identified as potentially benefiting from tailored messaging about HPV vaccine
  - Tested messages and identified messages that performed well
  - “New” ads went into the field in April, 2018
Updated Clinician-Focused Print Ads: Pediatricians & Family Physicians

Important, but we’re doing fine with coverage

- Do your HPV vaccine rates show how much you care?

If not, we can help

- More than 80% of people will get HPV.

Important for high-risk, but not everyone

- Let’s vaccinate 100% of proteums.

Not important, because we have screening

- Doctors routinely screen for cancer?
  - Oropharynx
  - Anal
  - Penis

None of these. Doctors don’t screen for most HPV cancers.

Not important enough to push parents

- Getting parents to accept HPV vaccination on time can depend on how you recommend it.

www.cdc.gov/HPV

Landing Pages

Human Papillomavirus (HPV)

CDC	Centers for Disease Control and Prevention

Search

HPV Vaccine is Cancer Prevention

Protect Your Patients from HPV Cancers

HPV Vaccine is Cancer Prevention

- Please see patients who are considering taking it.
  - HPV vaccine is one type of cancer screening and treatment.
  - Patients only need one dose for most patients, and it can be recommended with their current healthcare plan.
  - Vaccination protects anal, cervical, and genital cancers caused by HPV.

www.cdc.gov/HPV

Landing Pages

www.cdc.gov/HPV
You Are the Key to HPV Cancer Prevention

Talking to Parents about HPV Vaccine
HPV Screening Infographic

#HowIRecommend Videos

Dr. Ali Cader Discusses How I Recommend HPV Vaccine

Why HPV Vaccine is Recommended for Preemies; Dr. Xi Explains

Dr. Nestor: Talks about Why HPV Vaccine is Recommended for Preemies

Improving Your HPV Vaccine Recommendation: Suggestions from Dr. Sany

Dr. Klutman: Explains Why HPV Vaccine Is Recommended For Preemies
HPV Vaccine Information for Clinicians

Immunization Success Factors
Safety and Effectiveness Fact Sheet

Current Provider Research

- **Pilot Project**
  - To explore the process of selection, adoption, dissemination, and utility of materials for childhood and adolescent vaccination rates
    - Study I: Key informant interviews
    - Study II: Interviews and surveys to evaluate CDC Childhood and Adolescent vaccination materials
Acknowledgements

Jill Roark  
Ian Branam  
Ana Choban  
Sarah Cutchin  
Allison Fisher  
Yvonne Garcia  
Alison Vera Welski

Charnetta Williams  
Maureen Withee  
Fan Zhang  
FHI360  
Hager Sharp  
InStrat Media  
Porter Novelli

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333  
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.